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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/024,503	12/17/2001	Jeffrey K. Reinemann	10559-540001/P12560	4314
20985 7590 12/27/2006 FISH & RICHARDSON, PC P.O. BOX 1022 MINNEAPOLIS, MN 55440-1022			EXAMINER FISCHETTI, JOSEPH A	
			ART UNIT	PAPER NUMBER
			3627	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	12/27/2006	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

**Office Action Summary**

Application No.

10/024,503

Applicant(s)

REINEMANN, JEFFREY K.

Examiner

Joseph A. Fischetti

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 24 August 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

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***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-9 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 1, it is recited "receiving an upper limit of resources..." then it recited releasing a local resource...". Are these the same resources? If so then the receiving recitation of "resources" is meant to be the same resource as the local resource, then the former must be identified as "local resource" to have sense made of the claim.

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***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-9 insofar as understood, are rejected under 35 U.S.C. 103(a) as being unpatentable over Blumenau in view of Pian et al.

Blumenau et al. disclose a method of managing resources among networked processors 22,23,21,20 that include a host processor 22,23 and a remote processor 21. Blumenau et al. disclose a host activity monitoring facility 62 which reads on collecting accounting information at each of the networked processors to monitor utilization of the resources; releasing a local resource (local resource is read as the switch flow through the host ports) controlled by the host processor to the remote processor (remote processor is read as the switch control 55 which controls the switch functions of the hosts 22'-25'), col. 7 lines 61,62 disclose monitoring frequencies of the host to

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balance usage, the frequencies being a fixed range is read as a predetermined upper threshold and thus reads on "the utilization of the local resource maintained within a pre-determined upper threshold configured by an authorized user<sup>1</sup>"; and col. 7 line 59 discloses a dynamic balancing facility which computes a new list of host controls on the switches based upon, inter alia, frequency threshold, which reduces the availability of the local resource to the remote processor by the host processor. However, Blumenau does not appear to use an accounting manager which monitors the resources at the networked processor and releases resources based on collected accounting data nor do they disclose determining an upper limit of resource consumption for a remote processor. Pian et al. disclose a centralized accounting manager 122 which collects queue times from localized resources to collect accounting information (col. 8 lines 52 et seq.) at a networked processors 114 and further discloses determining an upper threshold for the local resource 146 e.g.,

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<sup>1</sup>Blumenau et al. discloses in full: The digital computer 60 is also programmed with a dynamic balancing facility 63 that periodically computes a new list of storage subsystem ports for each of the hosts to access, based on the frequencies measured by the host activity monitoring facility 62 and a specified priority level assigned to each of the hosts. The priority level, for example, is specified by a system administrator 65. The dynamic balancing facility 63 maintains in the digital computer 60 a copy of each list 61 of storage subsystem ports for each host to access. Therefore, the digital computer 60 need not read any corresponding list 57 in the switch control computer in order to determine the routing characteristics of the switch 50 for any host. The dynamic balancing facility 63, for example, accesses the list 61 in order to compute the loading on each of the storage subsystem ports from the measured frequencies of data packets received or transmitted from each host.

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an "upper limit is placed on the local ready task entry queue 146" and has a determined upper limit of resource consumption for the remote processor, see col. 9 lines 30-45 overflow occurs when nodes 124 have more tasks than they can hold. Further, Phan teaches releasing ready task entries to remote processors 112 when the processors 112 are not in a more than they can hold mode. It would be obvious to modify the method of Blumenau to include a centralized manager such as device 122 in Pian et al. and to determine an upper limit consumption for a remote processor in Blumenau et al. as a function of releasing the local resource as taught by Phan, the motivation being the increased ability to forecast downstream availability of a resource.

Re claims 2,8: see, Blumenau col. 7 lines 63 et seq. a specified priority level is assigned to each of the hosts thereby answering the limitation of negotiating because prioritization inherently requires negotiations; the loop ports of the hosts 24,25 are read as an amount of the local resource and the switch 40 is read as an amount of a remote resource; and since the activity e.g. releasing into service of the switch is proportional to that of the loop ports, there is read an exchange therebetween.

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Re claim 3, 5: Since the utilization of one host loop port in Blumenau will be exclusive of another's, this occurrence is read as substantially different in time.

Re claim 4, 6: the another resource is read as the balancing facility 63 of the computer in Blumenau which is read as the centralized location.

Re claim 9: the user defined condition is read as the access of hosts to storage in Blumenau.

Re claim 7: col. lines 13 et seq. discuss trying a port to determine if it is busy and if so then rerouting data until the first port is freed which is read as form of credit which is redeemed once the port frees up in Blumenau.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

REPLY:

Applicant 's amendments fail to overcome the outstanding rejections for the following reasons:

Blumenau et al. disclose:

The digital computer 60 is also programmed with a dynamic balancing facility 63 that periodically computes a new list of storage subsystem ports for each of the hosts to access, based on the frequencies measured by the host activity monitoring facility 62 and a specified priority level assigned to each of the hosts. The priority level, for example, is specified by a system administrator 65. The dynamic balancing facility 63

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maintains in the digital computer 60 a copy of each list 61 of storage subsystem ports for each host to access. Therefore, the digital computer 60 need not read any corresponding list 57 in the switch control computer in order to determine the routing characteristics of the switch 50 for any host. The dynamic balancing facility 63, for example, accesses the list 61 in order to compute the loading on each of the storage subsystem ports from the measured frequencies of data packets received or transmitted from each host.

Thus, the resource is read as the opening of a given sub-system port by the host, and the upper limit of resource is read as frequency capacity. The system administrator specifying the priority of each port is read the releasing step.

It is noted that applicant explains : a sharing policy that collects the resources of all the processors in a resource pool, the sharing policy specifies an upper limit, based on the age of the processor, for the amount of resources that a processor can consume from the resource pool. It is suggested that this phrase be incorporated into the claim 1.

Any inquiry concerning this communication should be directed to Joseph A. Fischetti at telephone number (703) 305-0731.



Joseph A. Fischetti  
Primary Examiner  
Art Unit 3627

JOSEPH A. FISCHETTI  
PRIMARY EXAMINER

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